

REMARKS**DETAILED ACTION**

Applicant respectfully believes the Office Action dated March 10, 2004 was incomplete, failing to referencing any action respective to Claims 39-42. Applicant will attempt to address reasons for allowance respective to the matter included within Claims 39-42 herein. Applicant respectfully advises the Examiner the re-examination of the Parent Patent is still pending.

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The Examiner has rejected Claims 1-2, 4-5, 9-12, 14-15, 19, 29-31, 33-34, and 38 under 35 U.S.C. 102(b) as being clearly anticipated by Stark, et al. Stark, et al disclose an apparatus for propelling a stream of particulate matter comprising all of the subject matter set forth in the claims above. A compressed gas source is delivered to a mixing chamber through a gas receiving port, and mixes with abrasive within the chamber, followed by discharge through a discharge conduit to strike a target material. The limitation of the particle-directing tube being "bendable" is a functional limitation which is deemed sufficiently broad to read on the discharge tube of Stark, et

al. While not shown as having a bend, the material in Stark is certainly capable of being bent. The device of Stark et al is of a size and shape to allow the nozzle to be hand- held.

Applicant has amended Independent Claims 1, 10, and 29 to include the element of disposability claimed within the previously added Claims 39-42 while adding clarity to the element of disposability.

Applicant has amended the claims to include "the mixing chamber is pre-charged with a particulate matter providing a disposable apparatus upon the exhaustion of the particulate matter disposed within the mixing chamber".

Applicant teaches an apparatus pre-charged with particulate matter. The apparatus that is designed to be disposed of upon exhaustion of the particulate matter.

Stark does not teach or support a disposable apparatus. Stark teaches a removable closure cap 33 (Col 2, lines 5-6). Stark further teaches, "in use, the reservoir 31 is partly or entirely filled with an appropriate grit or abrasive such as small particles of a hard material" (Col 2, lines 15-17). Since Stark teaches an apparatus for treating an object within a cup - outside the mouth, Stark would not consider, nor mention the

requirement of disposability respective to sterilization for objects used about / within the mouth.

Claims 5, 15, 28, and 34 all comprise the element of "manually bendable making the discharge from the elongated particle directing tube omni-directional at the time of use".

Stark fails to teach or illustrate an apparatus capable of being "manually bent".

Referencing Claims 5, 15, 28, and 34, applicant has amended Claims 5, 15, 28, and 34 to more clearly define the present invention as "manually bendable making the discharge from the elongated particle directing tube omni-directional at the time of use". This is supported in the specification of the issued parent patent in Col. 5, Lines 12-15. The present invention defines a manually bendable particle-directing tube that is designed to be bent by the user at the time of use.

Supporting Applicant's argument -

Stark teaches a propelling apparatus with a very short nozzle 36. It would be very difficult to bend the nozzle taught by Stark, more specifically manually bending the nozzle taught by Stark.

Herold, et al. 5,199,229 clearly states a curved nozzle pipe 33 (Col. 3, Line 49) meaning Herold is pre-bent, not bendable.

Zorzi 3,164,153 further supports this, as Zorzi teaches tubular needles 10 that are detachably connected (Col. 2 Lines 38-39). Zorzi further teaches "for proper use of the device, the apparatus will be accompanied by a plurality of replaceable pairs of needles 10, differing in size and shaped in particular of different lengths and partly down-turned and partly upturned, for treatment of lower and respectively upper teeth." (Col. 2 lines 53-58).

It is respectfully submitted the prior art defines pre-bent, not bendable needles, manually bent by the user at the time of use.

Claims 2, 4-5, and 9 depend from Independent Claim 1.

Claims 11-12, 14-15, and 19 depend from Independent Claim 10.

Claims 30-31, 33-34, and 38 depend from Independent Claim 29.

Applicant believes the rejection of Claims 1-2, 4-5, 9-12, 14-15, 19, 29-31, 33-34, and 38 under 35 U.S.C. 102(b) as being clearly anticipated by Stark, et al. have been overcome by amendments and remarks herein. Applicant earnestly requests the Examiner reconsider and withdraw the rejection of Claims 1-2, 4-5, 9-12, 14-15, 19, 29-31, 33-34, and 38 under 35 U.S.C. 102(b)

as being clearly anticipated by Stark, et al. based upon amendments and remarks herein.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. (Note – reference to second para 2 in Office Action dated 3-10-04) The Examiner has rejected Claims 6-8, 16-18, and 35-37 under 35 U.S.C. 103(a) as being unpatentable over Stark, et al in view of Dougherty. Dougherty discloses the known use of color coding of containers to identify the contents therein, and further disclose the known use of an end cap (70) for sealing the discharge end of a chamber to prevent the contents from being discharged. The use of color coding to help identify the contents of the chamber would have been obvious in view of Dougherty. Such color coding is used throughout industry for discriminating between similar looking containers, and for identifying their contents. To further provide an end cap at the distal end of the discharge conduit to prevent inadvertent discharge of the media from the chamber when not in use would have been obvious in view of Dougherty.

Dougherty teaches color-coding of an insertable cartridge. Applicant teaches color-coding of **particulate matter within a disposable apparatus**. Applicants invention is a novel, pre-filled particulate matter apparatus. It would not be obvious to include color coding for identifying particulate matter pre-filled within a disposable apparatus respective to the novelty of the Applicants invention - a pre-filled particulate matter apparatus.

Applicant believes the rejection to Claims 6-8, 16-18, and 35-37 under 35 U.S.C. 103(a) as being unpatentable over Stark, et al in view of Dougherty has been overcome by the amendments to the Independent Claims 1, 10, and 29 and remarks respective to the depending claims 6-8, 16-18, and 35-37. Applicant earnestly requests the Examiner reconsider and withdraw the rejection of Claims 6-8, 16-18, and 35-37 under 35 U.S.C. 103(a) as being unpatentable over Stark, et al in view of Dougherty based upon amendments and remarks herein.

4. The Examiner has rejected Claims 20-21, and 27-28 under 35 U.S.C. 103(a) as being unpatentable over Stark et al in view of Schur et al. In-as-much as Applicant is only entitled to the filing date of the CIP application for the new subject matter directed to the self-sealing mechanism recited in claim 20, the Schur et al reference is deemed to constitute prior art against this set of claims. Schur et al disclose a self-sealing one-way valve located within the chamber upstream of the

gas receiving port. To provide such a one-way valve in the chamber of Stark et al upstream of the gas receiving port, to prevent backflow of media would have been obvious in view of Schur et al.

Independent Claim 20 comprises the element of "a non-removable, self sealing mechanism contiguous to the sidewall of the chamber, wherein the self sealing mechanism opens to allow a gas stream to flow into the handheld mixing chamber when exposed to a gas stream, and the self sealing mechanism seals when not exposed to the gas stream, whereby the self sealing mechanism is located between the gas receiving port and the mixing chamber."

Applicant claims a non-removable (emphasis) self-sealing mechanism contiguous to the sidewall of the chamber.

Schur teaches a removable and complex self-sealing valve. Applicant claims a **non-removable self-sealing mechanism that is coupled to the sidewall of the chamber**. Applicants claimed invention provides a low cost solution that is superior to the teachings of Schur.

Schur et al. clearly teaches a removable valve apparatus providing a significantly differing solution. The solution taught by Schur et al. REQUIRES that a cap or other sealing means be added to the apparatus when not in use to maintain particulate matter within the chamber. Schur et al. teaches the application of a single valve apparatus for multiple mixing chambers, thus Schur et al. requires a second sealing member to maintain any particulate matter within said mixing chamber. Applicant's solution removes that requirement by providing a non-removable self-sealing apparatus which can further provide the feature of a

removable cap or other temporary sealing mechanism maintaining particulate matter within said mixing chamber.

The Examiner has rejected Claims 20-21, and 27-28 under 35 U.S.C. 103(a) as being unpatentable over Stark et al in view of Schur et al. Claims 21, 27 and 28 depend from Independent Claim 20. Applicant earnestly believes the rejections of Claims 20-21, and 27-28 under 35 U.S.C. 103(a) as being unpatentable over Stark et al in view of Schur et al. have been overcome by remarks herein. Applicant respectfully requests the Examiner reconsider and withdraw the rejection to Claims 20-21, and 27-28 under 35 U.S.C. 103(a) as being unpatentable over Stark et al in view of Schur et al.

3. The Examiner has rejected Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stark et al. in view of Schur et al. and further in view of Daubenberger et al. Schur et al. teaches to provide a check-valve in a location between the gas receiving port and the mixing chamber to prevent backflow of the abrasive media. Daubenberger et al. disclose a check-valve for one-way flow of media through a passageway comprising a hemispherical-shaped flexible material having a slit which closes to prevent backflow of media through the valve. To provide such a conventional hemispherical-shaped check-valve in the location taught by Schur et al to prevent backflow of media while minimizing the number of moving parts prone to wear, would have been obvious in view of Daubenberger et al.

Claims 22-25 depends from Independent Claim 20.

Independent Claim 20 comprises the element of "a non-removable, self sealing mechanism contiguous to the sidewall of the chamber, wherein the self sealing mechanism opens to allow a gas stream to flow into the handheld mixing chamber when exposed to a gas stream, and the self sealing mechanism seals when not exposed to the gas stream, whereby the self sealing mechanism is located between the gas receiving port and the mixing chamber."

Applicant claims a non-removable (emphasis) self-sealing mechanism contiguous to the sidewall of the chamber.

Schur teaches a removable and complex self-sealing valve. Applicant claims a **non-removable self-sealing mechanism that is coupled to the sidewall of the chamber**. Applicants claimed invention provides a low cost solution that is superior to the teachings of Schur.

Schur et al. clearly teaches a removable valve apparatus providing a significantly differing solution. The solution taught by Schur et al. **REQUIRES** that a cap or other sealing means be added to the apparatus when not in use to maintain particulate matter within the chamber. Schur et al. teaches the application of a single valve apparatus for multiple mixing chambers, thus Schur et al. requires a second sealing member to maintain any particulate matter within said mixing chamber. Applicant's solution removes that requirement by providing a non-removable self-sealing apparatus which can further provide the feature of a removable cap or other temporary sealing mechanism maintaining particulate matter within said mixing chamber.

Schur, et al. teaches away from a **non-removable self-sealing mechanism that is coupled to the sidewall of the chamber**, therefore it would be inventive to incorporate any form of valve as a non-removable, self-sealing mechanism that is coupled to the sidewall of the chamber.

The Examiner has rejected Claims 22-25, under 35 U.S.C. 103(a) as being unpatentable over Stark et al in view of Daubenberger et al. Claims 22-25 depend from Independent Claim 20. Applicant earnestly believes the rejections of Claims 22-25, under 35 U.S.C. 103(a) as being unpatentable over Stark et al in view of Daubenberger et al. have been overcome by remarks herein. Applicant respectfully requests the Examiner reconsider and withdraw the rejection to Claims 22-25, under 35 U.S.C. 103(a) as being unpatentable over Stark et al in view of Daubenberger et al.

Claims 43-46 have been added herein. Applicant believes the added claims have not added new matter.

Claim 43 comprises the elements of being prefilled, disposability in conjunction with the self-sealing mechanism.

Claim 44 comprises the element of a hemispherical membrane. The self-sealing mechanism taught is hemispherical on both sides.

Daubenberger, et al. teaches a hemispherical valve, being hemispherical on a single side and having a pocket on the opposing side.

Claim 45 comprises a self-sealing mechanism with two slits. Daubenberger, et al. teaches a hemispherical valve, being hemispherical on a single side and having a pocket on the opposing side and a single slit. The design as taught is not conducive to a plurality of slits.

Claim 46 adds the disposable element of claim 43 and the hemispherical and slit elements of claim 24.

Applicant believes the new claims overcome the cited prior art and should be allowable.

CONCLUSIONS

Applicants believe the amendments and remarks submitted herein, herein provide a complete response to the Office Action mailed on March 10, 2004. Claims 1, 2, 4-12, 14-15, 27-31, 32-38, and 43-46 remain in the application. Applicant believes the remaining claims are in condition for allowance. Applicant

earnestly requests the Examiner reconsider the rejections of claims 1, 2, 4-12, 14-15, 27-31, and 32-38. Applicant respectfully submits that Claims 39-42 have not been actioned in the correspondence dated March 10, 2004. Since the arguments presented herein are respective to the element(s) (disposable) contained within Claims 39-42, Applicant respectfully requests, should the Examiner rejection any of the pending claims comprising such element, the Examiner provide a non-final Office Action.

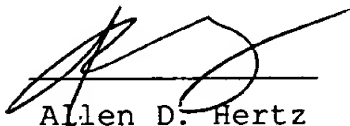
The Examiner has established a shortened statutory period of three (3) months for response to the Office Action. Applicant has responded to the Office Action on July 10, 2004 with a proper certificate of correspondence. Therefore, the Applicant believes the response requires a request for a one-month extension and believes that a fee of \$55 is required and submitted such herein. Applicant believes the response provided is complete. Applicant believes the amendments have not introduced any new matter.

The present application, after entry of this amendment, comprises thirty-eight (38) claims, including four (4) independent claims. Applicant has already submitted sufficient fees with the Original application for thirty-eight (38) claims, including four (4) independent claims. Applicant, therefore,

believes that no additional fee respective to claims is currently due.

If the Examiner believes that there are any informalities that can be corrected by Examiner's amendment, a telephone call to the Agent of Record (Allen Hertz) at (561) 883-0115 (Office) (Please leave a message) or (561) 716-3915 (Cell phone) is respectfully solicited.

Respectfully submitted,



Allen D. Hertz

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Please submit all correspondence concerning this patent application to:

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